

## Geoscience in Your State: Minnesota

Businesses that help the state and the people prosper, make a difference, and improve processes that sustain life and the economy. Understanding the state's role and objectives in economic, history and landscape can develop solutions to build economic, environmental, health and development.



- 650,000 people employed in the coal industry
- 77 million people in the power industry
- \$2 billion rise in coal mine production in 2017
- Global trade deal on coal, including 14 new export and import duties (2017)
- \$16 billion US aid package in 2017

- 32.000 die 5 milie riepolutie in 2017
- In 2018, 30.000 die 5 milie riepolutie in 2017

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- 1) [Google Analytics: Getting started](#)
- 2) [Web Analytics: How to use Google Analytics](#)
- 3) [Google Analytics: The basics](#)
- 4) [Google Analytics: How to use](#)
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- 6,639 geoscience employees (excludes self-employed)<sup>1</sup>
- 776 million gallons/day: total groundwater withdrawal<sup>3</sup>

- \$3.18 billion: value of nonfuel mineral production in 20174
- 60 total disaster declarations, including 25 flood, 24 severe storm, and 3 tornado disasters (1953-2017)6
- \$16.7 million: NSF GEO grants awarded in 2017...

## Read more in this Geoscience in Your State Factsheet...

### Agencies Working on Geoscience Issues in Minnesota

#### **Minnesota Board of Water and Soil Resources**

<https://bwsr.state.mn.us/>

The BWSR mission is to improve and protect Minnesota's water and soil resources by working in partnership with local organizations and private landowners. Core functions include implementing the state's soil and water conservation policy, comprehensive local water management, and the Wetland Conservation Act as it relates to the 41.7 million acres of private land in Minnesota

#### **Minnesota Department of Commerce**

<https://mn.gov/commerce/>

The mission of the Minnesota Department of Commerce is to protect the public interest, advocate for Minnesota consumers, ensure a strong, competitive and fair marketplace, strengthen the state's economic future; and serve as a trusted public resource for consumers and businesses.

#### **Minnesota Department of Natural Resources**

<https://www.dnr.state.mn.us/>

The mission of the Minnesota Department of Natural Resources is to work with citizens to conserve and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life.

#### **Minnesota Environmental Quality Board**

<https://www.eqb.state.mn.us/>

The Environmental Quality Board is made up of 9 agency heads and 8 citizen members. In addition to other duties, they provide leadership and coordination across agencies on priority environmental issues that are multi-jurisdictional, and multi-dimensional, as well as provide for opportunities for public access and engagement.

#### **Minnesota Geological Survey**

<http://www.mnngs.umn.edu/>

The MGS serves the people of Minnesota by providing systematic geoscience information to support stewardship of water, land, and mineral resources.

#### **Minnesota Geospatial Information Office**

<http://www.mngeo.state.mn.us/>

The Geospatial Commons is a one-stop catalog for Minnesota featuring open data which can be added to maps and research projects. Easily searched or browsed by contributing organization or theme, the Commons is steadily adding new resources.

#### **Minnesota Homeland Security and Emergency Management**

<https://dps.mn.gov/divisions/hsem/Pages/default.aspx>

The Division of Homeland Security and Emergency Management helps Minnesotans prevent, prepare for, respond to and recover from disasters and works to keep Minnesota secure from acts of terrorism.

#### **Minnesota Pollution Control Agency**

<https://www.pca.state.mn.us/>

The Minnesota Pollution Control Agency (MPCA) monitors environmental quality, offers technical and financial assistance, and enforces environmental regulations. The agency finds and cleans up spills or leaks that can affect public health and the environment. Staff develop statewide policy, and support environmental education.

## Maps & Visualizations



Interactive database for geologic maps of the United States  
U.S. Geological Survey

The U.S. Geological Survey hosts the National Geologic Map Database (NGMDB). This interactive tool serves as a national archive for high-quality, standardized geologic maps created by the U.S. Geological Survey and state geological surveys. The MapView section of the NGMDB displays geologic maps...

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## Case Studies & Factsheets

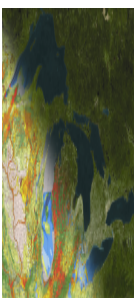


### Groundwater Protection in Oil and Gas Production

Introduction The United States relies on groundwater for roughly 25% of its fresh water.<sup>1</sup> This groundwater is found in porous, permeable rocks (aquifers) that often lie close to the Earth’s surface – the deepest freshwater aquifers are found more than 6,000 feet underground,<sup>2</sup> but most are much...

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## Webinars & Forums



### Geologic Mapping to Empower Communities: Examples from the Great Lakes

This webinar will introduce geologic mapping in the Great Lakes region, showcase projects from the Great Lakes Geologic Mapping Coalition, and review planning decisions made based on their work. Speakers from the Illinois, Minnesota, and Michigan State Geological Surveys will discuss case...

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